

Dr. Frazer read extracts from a letter from M. Daubr e of Paris requesting information on the subject of subterranean waters in the United States; and from his correspondence with Mr. Selwyn of Montreal, Prof. Fontaine and Prof. Winchell, endorsing his views of the prepal ozoic age of the South Valley hill rock.

Pending nominations Nos. 985, 986, were read.

The Treasurer was authorized to receive City Loan maturing July 1, 1883, and the meeting was adjourned.

A Brief Account of the more important Public Collections of American Arch eology in the United States. By Henry Phillips, Jr.

(Read before the American Philosophical Society, May 4, 1883.)

To the student of American Arch eology it is a matter of the greatest importance to know where in his own land there can be found public collections that will show him the advances made in the arts of war and peace by the aboriginal inhabitants of this Continent. In Europe there exist several of such exhibitions which are noteworthy and famous, where prehistoric America can be studied with great fullness of detail; in the United States there also are rich and valuable public cabinets of American arch eology, laboriously and carefully got together, offering a vast field to the seeker after Truth. As to *private* collections, their name is Legion. With a view to diffusing a more general acquaintance with these collections, I prepared a series of queries which I transmitted to every public institution where I had reason to believe there existed such a cabinet, and from the answers received, I have framed the following short account, bringing together matter never before presented at one view.*

ACADEMY OF NATURAL SCIENCES, of *Philadelphia*.

There are five collections of American Arch eology at present in the custody of this museum, which, with the exception of the Haldeman collection of arrow-points, stone axes, celts, banner stones, &c., are arranged geographically, and the locality given where each specimen was found. The col-

* No notice has been taken in the following pages of any matter which may relate to collections of *foreign* arch eology in the United States; it simply mentions the *American* portion of the cabinets.

lections, having lately been placed in another apartment, are in process of rearrangement, which is taking place under the care of Mr. H. T. Cresson, a well-known and careful student of American archæology.

The collections are as follows :

1. The Poinsett collection of Mexican antiquities, the property of the American Philosophical Society, and deposited by it in the custody of the Academy. It numbers about 2800 specimens, consisting of terra-cottas, objects of obsidian, gold and silver, beads, sculptures, manuscripts, &c., &c. This very fine collection is unique in the United States.

2. The Haldeman collection (about 10,000 specimens), presented by Prof. S. S. Haldeman and wife, in 1879.

3. The Ruschenberger collection of ancient Peruvian pottery (about 200 specimens), presented by Dr. W. W. Ruschenberger, formerly President of the Academy.

4. The Peale collection (about 1800 specimens), formed by Franklin Peale, Esq., and presented to the Academy by his widow.

5. The Vaux collection (about 900 specimens), bequeathed by Wm. S. Vaux, Esq., in 1882.

The especial features are the pottery in the Ruschenberger, Poinsett and Haldeman collections ; the valuable and important Poinsett collection as a whole ; and a large collection of axes (stone), arrow-points, &c., embracing many rare forms, from all parts of the United States.

AMERICAN PHILOSOPHICAL SOCIETY, *Philadelphia.*

The valuable collections of this Society are deposited with the Academy of Natural Sciences in Philadelphia, and displayed with its cabinets.

ARCHÆOLOGICAL INSTITUTE OF AMERICA, *Boston, Mass.*

This institution "deposits its collections in existing institutions."

AMERICAN ANTIQUARIAN SOCIETY, *Worcester, Mass.*

This cabinet was founded in 1812. Its collections, which although not numerous are valuable, consist of stone implements and mound relics, whose number has not been furnished. It is only partially arranged, catalogued and labeled, and the localities where the specimens were found are not always given.

AMHERST COLLEGE, *Amherst, Mass.*

This collection is about forty years old, and is mainly comprised of specimens found in the valley of the Connecticut river, within fifty miles of the town. The best specimens, some twenty-five hundred, are entered in the catalogue, an outline of each one being drawn. They are properly labeled, and the locality given where each was found. The especial features of the collection are samples of all the pottery supposed to be of New England aboriginal manufacture. It is also rich in Indian pipes.

BROWN UNIVERSITY, *Providence, R. I.*

This cabinet was begun in 1872. The specimens, which are numerous but whose exact number is not known, are arranged for the present typically. In most cases they are labeled with the name of the place where found.

DAVENPORT ACADEMY OF NATURAL SCIENCES, *Davenport, Iowa.*

This cabinet was formed during the last ten years from finds in the vicinity of fifty miles of the city. The pottery is mostly from the mounds of the Lower Mississippi valley; the shell ornaments and bone implements are also mainly from thence; the stone and flint implements from Wisconsin to the Gulf of Mexico, and from Florida to Colorado. It is classified chiefly typically. It possesses inscribed tablets found at Davenport, carved stone pipes, typical of the Upper Mississippi, *i. e.* of the "curved base" pattern, of which there are 57. This is the largest collection of this type in the United States.

Of other patterns of prehistoric pipes there are.....	30
Hammered copper axes.....	28
" " awls.....	16
" " beads.....	300
" " knives, &c.....	5

Prehistoric pottery vessels over 1000, some of them the largest ever found in North America :

Flint implements over.....	10,000
Stone " " 	1000
Hæmatite " " 	52
Obsidian points.....	25
Shell and pearl beads several hundred.	
Gorgetts and other shell ornaments.....	70
Bone implements mostly awls.....	120

Perforated ceremonial stones, &c., 21; skulls of northern mound-builders, 35; skulls of southern mound-builders, 33; skulls of Sioux Indians, 307; skulls of Central American, 127, &c.

The collection which is in process of catalogueing, is displayed in glass cases in such a manner as to be readily accessible.

The localities are given in the labels, together with many other details, "so that the whole explains itself to the visitor" writes Mr. W. H. Pratt, who kindly furnished the data for the foregoing account.

GEORGIA HISTORICAL SOCIETY, *Savannah, Ga.*

The collections of this Society were begun in 1839, but, not being very extensive, are not arranged in a strictly scientific manner. The specimens which are labeled, and on exhibition in the Society's Hall, are not catalogued.

METROPOLITAN MUSEUM OF ART, *New York City, N. Y.*

This collection (which is not large) consists of Mexican, Peruvian and Central American antiquities, and of mound-builder's pottery, all acquired since 1880, and numbers about 200 pieces. It is classified geographically. Among the noteworthy features of the collection are a remarkable Aztec pot and some pieces of Peruvian metal work. The Mexican terra-cottas are also worthy of remark. A catalogue is now in press in which the localities are given of each specimen so far as known.

MAYSVILLE AND MASON COUNTY HISTORICAL AND SCIENTIFIC ASSOCIATION, *Maysville, Ky.*

The collections of this Society were begun in 1875, their object being to illustrate the various implements used by the mound-builders of the Ohio Valley. The specimens were mostly found within a radius of fifteen miles of the town. The collections are not fully catalogued and arranged, but among the more noteworthy are a hæmatite skin-dresser, one leaden implement, two inscribed stones, eight discoidal stones, five boat-shaped stone images, twenty-two stone maize-beaters, thirty-two ground-stone hatchets, one stone image of a sheep or llama (head and half the body), ninety-two skin-dressers, sixty-two hammer-stones, six chert-choppers, two flint-choppers, three flint (burial) stones, seventeen slate ceremonial implements, two and one-half round sinkers, eleven stone sinkers, one stone plummet, two stone chisels, one stone roller, fifty-two flint drills, six hundred arrow and spear-points, eighty-seven war arrow-points, seventy flint knives, sixty-five scrapers, thirteen flint skin-dressers, one flint gouge.

MINNESOTA HISTORICAL SOCIETY, *St. Paul, Minn.*

The fine museum of this Society was destroyed by the fire of March 1, 1881. It now only possesses two stone hammers and a copper chisel.

MISSOURI HISTORICAL SOCIETY, *St. Louis, Mo.*

The collections of this Society are as yet in their infancy, and not catalogued and arranged.

NEW LONDON COUNTY HISTORICAL SOCIETY, *New London, Conn.*

This collection being of recent origin, has not yet been entirely arranged, classified, labeled, and catalogued. The specimens number about 2500.

THE NATIONAL MUSEUM, *Washington, D. C.*

This collection was established in 1842, its possessions then consisting of the specimens obtained during the Wilkes' Exploring Expedition. In 1858 it passed into the care of the Smithsonian Institution. The general collection is arranged typically; special collections from mounds, shell-heaps, &c., are kept together. At present it contains about 20,000 chipped implements, arrow-heads, &c.; about 3000 hammer stones, celts, pestles,

grooved axes, pipes, ornaments, &c.; about 800 objects of shell, beads, &c.; about 600 bronze implements and ornaments; about 600 shell-heap remains; about 700 mound remains; and about 300 cave remains. It is catalogued and the locality given where each specimen was found. "It is considered the largest existing collection of *North American* antiquities," writes Professor Baird. The display is made in sixty-two glass cases, in a hall 200 feet long by 50 wide.

PEABODY MUSEUM OF AMERICAN ARCHÆOLOGY AND ETHNOLOGY, *Cambridge, Mass.*

The Museum was founded by the gift of \$160,000 by Mr. George Peabody, in 1866.

The Museum has made a number of special explorations from which large returns have come, among which may be mentioned the exploration by Prof. Hartt in Brazil, those by Dr. Flint in Central America, and the many special explorations in North America, including those of Dr. Palmer in various parts of Mexico, and among the Indians of the Southwest; of Miss Fletcher among the Indians of the West; of the late Dr. J. Wyman (the first curator) in Florida and along the Atlantic coast, of Dr. Schumacher on the coast of California; Mr. H. Gilman in Michigan, of Prof. Andrews in Ohio, Mr. Dunning in Tennessee, Dr. Abbott in New Jersey, Dr. Metz in Ohio, Mr. Curtis in Tennessee and Arkansas, and the explorations of Prof. Putnam in various parts of the country, particularly of New England shell-heaps, of mounds and ancient burial places in the Western and Southwestern States, of caves in Kentucky, etc., etc.

"The Museum" writes Prof. F. W. Putnam, its curator, "contains by far the most important collections in existence relating to the archæology of America as a whole. (In ethnological material it is not so well off, but it contains pretty large collections of that.) The arrangement of the collections is based upon a geographical distribution of the materials in the several exhibition halls, but it is made to embrace an ethnological and archæological presentation of the subject. Every specimen in the Museum (over 300,000) is catalogued and numbered, and unless the exact locality and conditions under which a specimen was found is known, it is considered as worthless for exhibition, and of no value to an archæological or ethnological series."

PEABODY ACADEMY OF SCIENCE, *Salem, Mass.*

This collection is composed of those of the East India Marine Society (begun in 1799), and of the Essex Institute (1826), which in 1867 were permanently placed in the East India Marine Hall, purchased and refitted by the Trustees of the Peabody Academy of Science in that year.

The Department of American Archæology contains 2390 catalogue numbers, in all about 5500 specimens; axes, 100; celts, 150; gouges, 150; club-heads, 50; hammer-stones, 50; long stones (pestles), 100; discs, 10; spear-points, 500; arrow-points, 2000; scrapers, 200; bones

from shell-heaps, a half bushel; bone implements, 50; grave contents, 25 skulls, and long bones and numerous implements, shell beads, &c.; copper implements, 2; soapstone pots, 3; broken pottery (soapstone), 50; clay pots, 5; broken clay pottery, 500; core stones and rude implements, 500; chips, a bushel; mortars and mills, 6; ceremonial objects, 50; shoes, &c., (salt cave, Kentucky,) 20; implements showing contact with European civilization, 50; bone spoons from graves, 4; knives, of various shapes; piercing tools, 10. The bulk of the collection is from the Eastern portion of the United States, very few being from south of Pennsylvania or west of New York State. They are arranged by types according to the order of Abbott's primitive industry, and the special features of the collection are the specimens figured in that work. All are labeled. The "archæology of Essex County, Mass.," is arranged separately, and made an especial feature of the Museum. It is in a case seven feet high and forty feet long. Independent of the usual assortment of axes, celts, gouges, &c.; it contains one very fine skeleton intact from a reburial at Marblehead, Mass., and a number of grave contents, such as beads, wampum and bones, &c.; also articles from shell-heaps, and the entire valuable contents of one shell-heap opened in 1882. The general appearance of these implements is rude as compared with those from the Western States, and the finds are but scanty in comparison.

Especial attention is called to the manner in which the specimens are fastened, so that placed in upright cases, every kind of article may be placed. Bent headless pins are used to clamp the objects on black tablets which are placed on easels and in the cases.

"The Museum is one of the first-class," writes Mr. John Robinson, Treasurer and temporary Curator, who has kindly furnished the data for the foregoing account.

PHILADELPHIA. THE NUMISMATIC AND ANTIQUARIAN SOCIETY OF

This collection was begun in January, 1858. It is at present undergoing rearrangement and classification, by Mr. Edwin A. Barber, Curator of Antiquities, so that no exact details can be given, but it is believed that by the end of the present year it will be in perfect order; before which time also the Society expects to receive some remarkable American antiquities, almost unique in this country.

PENNSYLVANIA MUSEUM AND SCHOOL OF INDUSTRIAL ART, *Memorial Hall, Fairmount Park, Philadelphia.*

This institution possesses a small but valuable collection of Peruvian, Pueblo and other American pottery. A large collection of American archæology at present on exhibition will probably shortly be removed on account of the death of the owner.

POLYTECHNIC SOCIETY, *of Louisville, Kentucky.*

This Society "possesses some rare and valuable archæological specimens," but they are neither catalogued, classified nor arranged. "Among the more important," writes Mr. E. A. Grant, "is a copper spool found in a mound, much oxidized, but still having the remains of fibrous cord imbedded in the copper, so that the same can be removed."

RHODE ISLAND HISTORICAL SOCIETY, *Providence, R. I.*

The collection was begun in 1823. It is not at present fully classified; the localities of the specimens are not always given; their number is unknown. Mr. Perry, the Secretary of the Society, writes, "Our Indian relics need a thorough overhauling."

TENNESSEE HISTORICAL SOCIETY, *Nashville, Tenn.*

In its cabinets are many objects of American archæology (number not given), including Pueblo manufactures, stone images, arrow-heads, fleshers, discs, &c., &c. Some are on exhibition in the State Capitol, and the Society expects to soon occupy a new hall, where its large and valuable collection will be properly arranged and displayed.

UNIVERSITY OF MICHIGAN, *Ann Arbor, Michigan.*

This collection has "never been classified or catalogued. It is in process of removal to a special room where it will be arranged geographically." The number of its specimens is not known. Among the most noticeable are Peruvian pottery, and Alaskan implements, &c.

WISCONSIN NATURAL HISTORY SOCIETY, *Milwaukee, Wis.*

This collection has not yet been fully classified nor catalogued, nor are the specimens all labeled, but it is expected that before long it will be properly arranged and put in complete order. "It contains" writes Mr. Carl Dœrflinger, the Secretary and Custodian, "some 2500 specimens, including 300 arrow-heads, 100 stone hammers, axes, &c., 20 copper implements, among which latter are some interesting forms."

They are displayed in table and wall-cases.

WISCONSIN HISTORICAL SOCIETY, *Madison, Wis.*

The collection (which is a large and valuable one) was all found within the limits of Wisconsin and mainly in the southern part of the State. It is arranged typically and all specimens are marked with the localities whence obtained. A catalogue exists in manuscript.

In 1876 the number was as follows: *Copper* implements, spears, knives and tomahawks, 109; stone rollers, pestles, scrapers, knives, awls, &c.

600 ; stone axes (one weighing $8\frac{1}{2}$ lbs.) 365 ; stone pipes and perforated ornaments, about 250 ; and over 8000 spear—lance—and arrow-heads.

The collection has been largely increased since 1876. "The especial feature of the collection" (writes Mr. I. S. Bradley, of Madison) "is the great number of large and well made *copper* implements, and some remarkably fine stone axes."

The collection is displayed in horizontal glass cases.

WYOMING HISTORICAL AND GEOLOGICAL SOCIETY, *Wilkes-Barre, Pa.*

"This cabinet originated in the year 1858, the date of the foundation of the Society. The collection is in the main made up of local finds, a few specimens being from other places at a distance ; it may, however, be considered as a distinctively local collection. It is classified typically, and consists of specimens as follows :

Pottery : 5 specimens as shown in publication No. 4, also 2 specimens of such size as to show the shape, size and design of vessel, and about one-half a bushel of fragments collected for purpose of studying material used in their manufacture, ornamentation, &c.

Net sinkers, 125 ; *hoes*, 5 ; *hand-hammers* or *hammer-stones*, 41 ; *rubbing-stones*, 5 ; *discoidal stones*, 10 ; *ceremonial objects*, perforated, 5 as shown on page 352 of Abbott's "Primitive Industry," 2 such as shown on page 356, and 1 as on page 359, and several fragments of same ; *totems*, *gorgets*, &c., 25, and *fragments* ; *beads*, 5 strings ; *pipes*, 15 ; *celts*, *skinners* and *chisels*, 60 ; and 15 broken specimens ; *tomahawks*, 11 ; *ground-stone axes*, 22 ; *ground-stone club heads* or *death mauls*, 17 ; *mortars*, stone, 3 ; *lignumvite* 1 ; *shallow mortars* or *lap-stones*, 5, 2 of them bi-concave ; *crushers*, 4 ; *pestles*, 20 perfect, and 14 broken ; *plummets*, 3 ; *engraved stone*, 1 ; *plows*, 2 ("I have never seen these implements described, and call them plows at a venture ;" writes Mr. Sheldon Reynolds, the Curator of the Society, who has kindly furnished the description of the collection), they are about 18 inches long, 4 inches square at one end, retaining the square throughout nearly half their length, they are then rounded and the balance is in shape of a tapering pestle, weighing about 15 or 20 pounds.

Stone last, 1: (Roughly chipped stone bearing close resemblance to a last, and supposed to have been used for that purpose).

Pitted stones, 2 : Supposed to have been used for mixing colors in.

Palæolithic instruments, 4.

1 *large flat stone*, evidently used for smoothing (dressing) skins, found covering Indian grave.

Arrow-points, 2400.

Spear-points, 150.

1 *copper spear-point*, found in mound in neighborhood.

3 *crania* ; 3 *bows* ; 2 *quivers* ; 1 *canoe* ; 2 *belts wampum*.

The collection is believed to represent in a fair degree generally the articles of ornament, domestic utensils, and weapons of the chase and warfare of the aborigines.

It is displayed in glass-covered table cases ; each object bearing a number and the name of the person who gave it ; when practicable the number refers to a manuscript descriptive catalogue.

It is catalogued with the other collections of the Society. A separate catalogue of each department is about to be begun.

The localities are given where each specimen was found.

“The stone last is believed to be unique, and perhaps the plows. The engraved stone is an object of interest as representing growing plants, resembling tobacco and corn; the stone is broken, of irregular shape, and about three inches square. (?) Among the arrow-points are some stained a light purple ; the coloring extends one-half the length. No analysis of the coloring matter has been made. These arrows are very diminutive, some not more than three-quarters of an inch over all ; others somewhat larger. They were found on the flats opposite the city of Wilkes-Barre. Arrow-points of this size are said to be of rare occurrence east of the Allegheny mountains.”

NOTE.—The following list embraces the names of Institutions to which letters of inquiry were sent upon information that they were in the possession of collections of specimens of American archæology, but from which no responses have been received.

- Academy of Natural Sciences, Baltimore, Md.
- Academy of Natural Sciences, San Francisco, Cal.
- American Museum of Natural History, New York, N. Y.
- Boston Society of Natural History, Boston, Mass.
- Bristol (town of), Bristol, R. I.
- Bronson Library, Waterbury, Conn.
- Brook's Museum, University of Virginia, Va.
- Cincinnati Historical and Philosophical Society, Cincinnati, Ohio.
- Firelands Historical Society, Norwalk, Ohio.
- Franklin Society, Providence, R. I.
- Kentucky State Geological Survey, Frankfort, Ky.
- Long Island Historical Society, Brooklyn, N. Y.
- Macon Public Library, Macon, Ga.
- Madisonville Natural History Society, Madisonville, Ohio.
- Maine Historical Society, Portland, Me.
- Middlebury Historical Society, Middlebury, Conn.
- New Hampshire Antiquarian Society, Contoocook, N. H.
- Newport Historical Society, Newport, R. I.
- New York Historical Society, New York, N. Y.
- Toledo Historical and Geographical Society, Toledo, Ohio.
- University of California, San Francisco.
- Vineland Historical and Antiquarian Society, Vineland, N. J.
- Western Reserve Historical Society, Cleveland, Ohio.
- Yale College, New Haven, Conn.
- Young Men's Library, Atlanta, Ga.